

Please type a plus sign (+) inside this box $\rightarrow \square$



Filing Date

Application Number

MAY 1 7 2001

PTO/SB/21/

09/464,416

12/16/1999

TECH CENTER 1600/2009 of or use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

MAN ' E FORM		First Named Inventor		Yasmin Thanavala et al.			
(to the dised for all correspondence after initial filing)			Group Art Unit		1651		
A TRADER	Examiner Name		M. Flood				
Total Number of Pages in This Submission 18			Attorney Docket	Number	RPP:156B US		
							
		ENCLO	SURES (chec	k all that a	ipply)		
Fee Transmittal Form Fee Attached Amendment / Reply After Final Affidavits/decl Extension of Time R Express Abandonme Information Disclosu Certified Copy of Production Certified Copy of Production Response to Missing Incomplete Application Response to M under 37 CFR	aration(s) equest nt Request are Statement iority Parts/ ion (for Dra Ado Peti Prov Cha Ado Cha Cha Cha Ado Cha Cha Cha Cha Cha Cha Cha Ch	Assignment Paper (for an Application Drawing(s) Licensing-related Petition Petition to Convert Provisional Applition Power of Attorner Change of Correst Address Terminal Disclair Request for Refure CD, Number of Correst CD, Number of Correst CD, Number of CD		to A O O O O O O O O O	After Allowance Communication to Group Appeal Communication to Board of Appeals and Interferences Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please identify below):		
	SIGNATURE OF A	DDI ICA	NT ATTODNEY	OD ACE	NT		
Firm Mic	SIGNATURE OF A hael L. Dunn, Dunn &	-		UK AGE	111		
or Individual name		1155001					
Signature Mulcul W							
Date May 5_, 2001							
	CERT	TIFICAT	E OF MAILING				
I hereby certify that this co mail in an envelope addres	rrespondence is being deposi sed to: Commissioner for Pa	ted with the	e United States Posta nington, DC 20231 or	I Service win this date:	th sufficient postage as first class Mav G . 2001		
Typed or printed name Michael L. Dunn Signature Date May 5, 2001							
Signature		Date N	1ay 5 , 2001				

C CONTRACTOR AND A STORE STORE AND A STORE STORE AND A STORE STORE AND A STORE STORE AND A	- 1				Complete if Known	
THE TRANSMITTAL	Applicat	ion N	lumb	er	09/464,416	
·					12/16/1999 WAY	172
			nven	tor	Yasmin Thanavala et al	
Rejent fees are subject to annual revision.	Examine	r Na	me		M. Flood	ER 16
	Group A				1001	
FAMILIOUNT OF PAYMENT (\$) 130.00	Attorney	/ Doc	_		RPP:156B US	
METHOD OF PAYMENT				_	ALCULATION (continued)	
The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:	3. AD		ONA	L FE		
Descrit		Large Entity		Entit	у	
Account 04-1790	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Pai
Deposit		130	205	65	Surcharge - late filing fee or oath	
Account				25		
Name	127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
Charge Any Additional Fee Required	139	130	139	130	Non-English specification	<u> </u>
Under 37 CFR 1.16, 1.17, 1.18 and 1.20	147 2,	520	147	2,520	For filing a request for ex parte reexamination	
Applicant claims small entity status. See 37 CFR 1.27	112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
Payment Enclosed:	113 1,	,840*	113	1,840*	Requesting publication of SIR after Examination action	
Check Credit Card Money Order Other FEE CALCULATION	115	110	215	55	Extension for reply within first month	
	116	390	216	195	Extension for reply within second month	
BASIC FILING FEE Large Entity Small Entity	117	890	217	445	Extension for reply within third month	
Fee Fee Fee Fee Fee Description Code (\$) Code (\$) Fee Pai			218	695	Extension for reply within fourth month	
(4)	1.0 .,					
101 710 201 355 Utility filing fee \$\ \) 106 320 206 160 Design filing fee	- 1 128 1,		228	945	Extension for reply within fifth month	
107 490 207 245 Plant filing fee		310	219	155	Notice of Appeal	ļ
	120	310	220	155	Filing a brief in support of an appeal	
108 710 208 355 Reissue filing fee	121	270	221	135	Request for oral hearing	
114 150 214 75 Provisional filing fee	□ 138 1	,510	138	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1)	140	110	240	55	Petition to revive - unavoidable	
(\$)	141 1,	,240	241	620	Petition to revive - unintentional	
EXTRA CLAIM FEES	142 1,	.240	242	620	Utility issue fee (or reissue)	
Fee from						
Extra Claims below Fee Paid	143	440	243	220	Design issue fee	· · ·
otal Claims20** = X =	144	600	244	300	Plant issue fee	
dependent3** = X =	122	130	122	130	Petitions to the Commissioner	130
aims =	123	50	123	50	Processing fee under 37 CFR 1.17(q)	
ultiple Dependent	126	180	126	180	Submission of Information Disclosure Stmt	L
Large Entity Small Entity Fee Fee Fee Fee Fee Description	581	40	581	40	Recording each patent assignment per property (times number of properties)	
Code (\$) Code (\$) 103 18 203 9 Claims in excess of 20	146	710	246	355	Filing a submission after final rejection (37 CFR § 1.129(a))	
102 80 202 40 Independent claims in excess of 3	149	710	249	355		
104 270 204 135 Multiple dependent claim, if not paid					examined (37 CFR § 1.129(b))	
109 80 209 40 **Reissue independent claims over original patent	179	710	279	355	Request for Continued Examination (RCE)	
110 18 210 9 **Reissue claims in excess of 20 and over original patent			169	900	Request for expedited examination of a design application	
SUBTOTAL (2)	Other	fee (sp	ecify) _		(\$) 130.0	0
**or number previously paid, if greater, For Reissues, see above	*Reduce	d by B	asic Fi	iling Fe		
or manager previously part, it greater, nor acissues, see above						

WARNING: Information on this form may become public. Credit card information should not

Signature

May_\$2001

#17 / S/18/01
RPP:156B US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Yasmin Thanavala et al.

Art Unit:

1651

MAY 1 7 2001

TECH CENTER 1600/2900

Serial No:

09/464,416

Filed:

12/16/1999

Examiner:

M. Flood

For:

ORAL IMMUNOLOGY

USING PLANT PRODUCT CONTAINING A NON-ENTERIC PATHOGEN

ANTIGEN

PETITION TO CORRECT INVENTORSHIP UNDER 37 C.F.R. §1.48

Commissioner for Patents Washington, D.C. 20231

Sir:

After filing of the above-identified patent application, it was determined that Hugh S. Mason should have been named as a joint inventor.

As evidenced by the enclosed Declaration, the above invention was made and reduced to practice by inventors, Yasmin Thanavala, Charles J. Arntzen and Hugh S. Mason. Without deceptive intent at the time of filing, it was not realized that Dr. Hugh S. Mason should have been added as an inventor for being intimately involved in design, creation and characterization of the transgenic plant material used in the studies incorporated into this patent application, which activities took place at his laboratory at Boyce Thompson Institute for Plant Research, Inc., Room 407, Tower Road, Ithaca, New York 14853, either by Dr. Mason or others under his direct supervision.

It is also agreed upon by the two assignees in this patent application, namely Health Research, Inc. and Boyce Thompson Institute for Plant Research, Inc., that Dr. Hugh S. Mason should be added as a co-inventor along with Dr. Yasmin Thanavala and Dr. Charles J. Arntzen as evidenced by the two enclosed Declarations under 37 CFR §1.48(a)(4).

In view of the foregoing and the enclosed Declarations of Yasmin Thanavala, Charles J. Arntzen, Hugh S. Mason and the Assignees, it is hereby respectfully requested that Hugh S. Mason be added as an inventor to the above-identified patent application.

Dated: May 8, 01

Respectfully submitted,

Michael L. Dunn

Attorney for Applicant(s)

Reg. No. 25,330

P.O. Box 10

Newfane, New York 14108

Telephone: (716) 433-1661

MLD/csc



RPP:156B US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Yasmin Thanavala et al.

Art Unit:

1651

Serial No:

09/464,416

Filed:

12/16/1999

Examiner:

M. Flood

For:

ORAL IMMUNOLOGY

USING PLANT PRODUCT CONTAINING A NON-ENTERIC PATHOGEN

ANTIGEN

CONSENT OF ASSIGNEE TO ADD INVENTORS UNDER 37 CFR §1.48(a)(5)

Commissioner for Patents Washington, D.C. 20231

Sir:

WHEREAS, Health Research, Inc., an Assignee of record of the above-identified patent application as recorded in the U.S. Patent and Trademark Office records at Reel <u>010627</u> and Frame <u>0713</u>, and as evidenced by the enclosed copy of the Notice of Recordation of Assignment document;

THAT, Health Research, Inc., has been notified of the situation wherein one inventor not previously named in the above-identified U.S. patent application should be added;

THAT, the originally named inventor Yasmin Thanavala has consented to the addition of the new inventor Hugh S. Mason and that the new inventor Hugh S. Mason

believes he has contributed to the invention and should be subsequently added as an inventor;

THAT, Health Research, Inc., hereby consents to the addition of the aforementioned inventor, Hugh S. Mason.

THAT, all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated:	5	/2	/0/			
		-				

For and on Behalf of Health Research, Inc.

Michael D. DeLellis Director of Operations





UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

MAY 16, 2000

DUNN & ASSOCIATES MICHAEL L. DUNN P.O. BOX 10 NEWFANE, NEW YORK 14108 DUNN & ASSOCIATES

MAY 3 0 2000

1012978453

RECEIVED

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/23/2000

REEL/FRAME: 010627/0713

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

THANAVALA, YASMIN

DOC DATE: 02/10/2000

ASSIGNEE:

HEALTH RESEARCH, INC. ELM AND CARLTON STREETS BUFFALO, NEW YORK 14263

SERIAL NUMBER: 09464416

PATENT NUMBER:

FILING DATE: 12/16/1999

ISSUE DATE:

ALLYSON PURNELL, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

FORM: PTO-1595 I 03-27-20	U.S. DEPARTMENT OF COMMERCE
OMB No. 0651-0011 (exp. 4/94)	Patent and Trademark Office
To the Honorable Commissioner c thereof.	TRACE and address of receiving party(ies)
1. Name of conveying party(ies):	2. Name and address of receiving party(ies)
Yasmin Thanavala	Name: Health Research, Inc. Internal Address: Elm and Carlton Streets
Additional name(s) of conveying party(ies) attached? [] Yes [X] No	
3. Nature of Conveyance:	7
[X] Assignment [] Merger	Street Address: same as above
[] Security Agreement [] Change of Name	City: Buffalo State: New York ZIP: 14263
Execution Date: February 10, 2000	Additional name(s) & address(es) attached? [] Yes [X] No
4. Application number(s) or patent number(s):	, , , , , , , , , , , , , , , , , , , ,
If this document is being filed together with a new application, t	he execution date of the application is:
A. Patent Application No.(s) 09/464,416	B. Patent No.(s)
Additional accordance of	
5. Name and address of party to whom correspondence	ached? [] Yes [X] No
concerning document should be mailed:	6. Total number of applications and patents involved: 1
Name: Dunn & Associates	7. Total fee (37 CFR 3.41)\$ 40.00
Internal Address: P.O. Box 10	[X] Enclosed
	[] Authorized to be charged to deposit account
Street Address: same as above	8. Deposit account number:
City: Newfane State: NY ZIP: 14108	(Attach duplicate copy of this page if paying by deposit account)
27/2000 DCDATES 00000040 09464416 DO NOT US	E THIS SPACE
FC:581 40.00 OF	
9. Statement and signature. To the best of my knowledge and belief the foregoing information original document; however, the above information is not to be under the statement of the statement	on is true and correct and any attached copy is a true copy of the used to interpret the document which speaks for itself.
Michael L. Dunn Name of Person Signing Signature	Feb 15, 2000
Name of Person Signing Signature	Date

ASSIGNMENT OF INVENTION

WHEREAS, I, YASMIN THANAVALA residing at 157 Presidio Place, Williamsville, New York 14221, have invented certain new and useful improvements in:

ORAL IMMUNOLOGY USING PLANT PRODUCT CONTAINING A NON-ENTERIC PATHOGEN ANTIGEN

for which I have made application for Letters Patent in the United States; and for which the specification was filed on December 16, 1999, and assigned U.S. Serial No. 09/464,416;

AND WHEREAS, **HEALTH RESEARCH**, **INC.**, Roswell Park Cancer Institute, Elm & Carlton Streets, Buffalo, New York 14263, a corporation of the State of New York, is desirous of acquiring all interest in said invention, said application disclosing the invention and any Letters Patent which may be granted therefor:

NOW THIS INDENTURE WITNESSETH, that for the sum of One Dollar, and other valuable consideration to me in hand paid, the receipt whereof is hereby acknowledged, I hereby assign, sell and transfer unto said **HEALTH RESEARCH**, **INC.**, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights, Convention rights, and other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto;

And I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said **HEALTH RESEARCH**, **INC.**, as the Assignee of the whole right, title and interest thereto;

And I further agree to execute all necessary and lawful future documents, including assignments in favor of HEALTH RESEARCH, INC., or its designee as HEALTH RESEARCH, INC., or its Assignee may from time-to-time present to me in order to perfect title

in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to sign and properly execute such necessary and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and/or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the Assignee thereof shall hereafter require and prepare at its own expense.

mvontion, as the Assignee thereof shall herea	iter require and prepare at its own expense.
WITNESS, my hand and seal this 10	day of Februar 2000.
WITNESS:	
L. G. Clain	Pasmin Itanovale.
	Yasmin Thanavala
WITNESS:	
J. S. Lyner	
STATE OF NEW YORK	
COUNTY OF <u>Crie</u>	SS:
On this 10th day of February	in the year of 2000, before me, the subscriber,
	A to me known to be the person described in and
who executed the foregoing instrument, and w	ho acknowledged that he executed the same.
[SEAL] CHERYL A. ZUBER Notary Public, State of New York No. 4865348 Qualified in Erie County My Commission Expires July 7.	Cheyl a. Butu Notary Public



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Yasmin Thanavala et al.

Art Unit:

1651

Serial No:

09/464,416

Filed:

12/16/1999

Examiner:

M. Flood

For:

ORAL IMMUNOLOGY

USING PLANT PRODUCT CONTAINING A NON-ENTERIC PATHOGEN

ANTIGEN

CONSENT OF ASSIGNEE TO ADD INVENTORS UNDER 37 CFR §1.48(a)(5)

Commissioner for Patents Washington, D.C. 20231

Sir:

WHEREAS, Boyce Thompson Institute for Plant Research, Inc., an Assignee of record of the above-identified patent application as recorded in the U.S. Patent and Trademark Office records at Reel <u>010627</u> and Frame <u>0726</u>, and as evidenced by the enclosed copy of the Notice of Recordation of Assignment document;

THAT, Boyce Thompson Institute for Plant Research, Inc., has been notified of the situation wherein one inventor not previously named in the above-identified U.S. patent application should be added;

THAT, the originally named inventor Charles J. Arntzen has consented to the addition of the new inventor Hugh S. Mason and that the new inventor Hugh S. Mason

believes he has contributed to the invention and should be subsequently added as an inventor;

THAT, Boyce Thompson Institute for Plant Research, Inc., hereby consents to the addition of the aforementioned inventor, Hugh S. Mason.

THAT, all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

> For and on Behalf of Boyce Thompson Institute for Plant Research, Inc.

Typed Name:

Title: Director of Licensing & Intellectual

Property Management

MAY 1 & 2001 BY STATES OF LINE OF LINE

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

MAY 16, 2000

DUNN & ASSOCIATES MICHAEL L. DUNN P.O. BOX 10 NEWFANE, NY 14108 DUNN & ASSOCIATES

*101297846A

MAY 3 0 2000

RECEIVED

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/23/2000

REEL/FRAME: 010627/0726

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ARNTZEN, CHARLES J.

DOC DATE: 01/24/2000

ASSIGNEE:

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC.

TOWER ROAD

ITHACA, NEW YORK 14853-1801

SERIAL NUMBER: 09464416

PATENT NUMBER:

FILING DATE: 12/16/1999

ISSUE DATE:

LAWAN FLETCHER, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

EODM DTO 1505	
FORM PTO-1595 (Rev. 6-93) OMB No. 0651-0011 (exp. 4/94) PATENT	
(CAP. 1171)	SUNLI
To the Honorable Commissioner of Patents and Frademarks:	Please record the attached original documents o
thereof.	
1. Name of conveying party(ies): Charles J. Arntzen RAPENIA	2. Name and address of receiving party(ies) Name: Boyce Thompson Institute for Plant Research, Inc. Internal Address: Tower Road
Additional name(s) of conveying party(ies) attached? [] Yes [X] No	Internal Address: Tower Road O Internal Address: Tower Road
3. Nature of Conveyance:	
[X] Assignment [] Merger	Street Address: same as above
[] Security Agreement [] Change of Name	
[] Other	City: Ithaca State: New York ZIP: 14853-1801
Execution Date: January 24, 2000	Additional name(s) & address(es) attached? [] Yes [X] No
4. Application number(s) or patent number(s):	<u> </u>
If this document is being filed together with a new application, the	ne execution date of the application is:
A. Patent Application No.(s) 09/464,416	B. Patent No.(s)
A 44%1 1	1 10 5 137 537 37
5. Name and address of party to whom correspondence	ched? [] Yes [X] No
concerning document should be mailed:	6. Total number of applications and patents involved: 1
Name: Dunn & Associates	7. Total fee (37 CFR 3.41)\$ 40.00
Internal Address: P.O. Box 10	[X] Enclosed
	[] Authorized to be charged to deposit account
Street Address: same as above	8. Deposit account number:

03/27/2000 DCDATES 00000039 09464416

City: Newfane State: NY

ZIP 14108

(Attach duplicate copy of this page if paying by deposit account)

01 FC:581

DO NOT USE THIS SPACE

9. Statement and signature.

40.00 OP

To the best of my knowledge and belied the foregoing information is true and correct and any attached copy is a true copy of the original document; however, the above information is not to be used to interpret the document which speaks for itself.

Michael L. Dunn Name of Person Signing <u>Lul</u> Signature

Feb 17, 2000

Total number of pages including cover sheet, attachments, and document: 3

ASSIGNMENT OF INVENTION

WHEREAS, I, CHARLES J. ARNTZEN residing at 1005 Highland Road, Ithaca, New York 14850-1447, have invented certain new and useful improvements in:

ORAL IMMUNOLOGY USING PLANT PRODUCT CONTAINING A NON-ENTERIC PATHOGEN ANTIGEN

for which I have made application for Letters Patent in the United States; and for which the specification was filed on December 16, 1999, and assigned U.S. Serial No. 09/464,416;

AND WHEREAS, BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC., Tower Road, Ithaca, New York 14853-1801, a corporation of the State of New York, is desirous of acquiring all interest in said invention, said application disclosing the invention and any Letters Patent which may be granted therefor:

NOW THIS INDENTURE WITNESSETH, that for the sum of One Dollar, and other valuable consideration to me in hand paid, the receipt whereof is hereby acknowledged, I hereby assign, sell and transfer unto said BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC. the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights, Convention rights, and other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto;

And I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC., as the Assignee of the whole right, title and interest thereto;

And I further agree to execute all necessary and lawful future documents, including assignments in favor of BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC., or its designee as BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC., or its

Assignee may from time-to-time present to me in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to sign and properly execute such necessary and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and/or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the Assignee thereof shall hereafter require and prepare at its own expense.

WITNESS:

Charles J. Armzen

WITNESS:

Charles J. Armzen

WITNESS:

STATE OF NEW YORK

COUNTY OF

On this 2 h day of January

in the year of 2000, before me, the subscriber, personally appeared CHARLES J. ARNTZEN to me known to be the person described in and who executed the foregoing instrument, and who acknowledged that he executed the same.

oslay & Measures-

LESLEY J. MEASURES Notary Public - Arizona

[SEAL]



RPP:156B US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Yasmin Thanavala et al.

Art Unit:

1651

Serial No:

09/464,416

Filed:

12/16/1999

Examiner:

M. Flood

For:

ORAL IMMUNOLOGY

USING PLANT PRODUCT CONTAINING A NON-ENTERIC PATHOGEN

ANTIGEN

DECLARATION UNDER 37 C.F.R. §1.48(a)(2)

Commissioner for Patents Washington, D.C. 20231

Sir:

Yasmin Thanavala, Charles J. Arntzen and Hugh S. Mason declare:

THAT, Yasmin Thanavala and Charles J. Arntzen were the originally named inventors in the above-identified U.S. Patent Application;

THAT, at the time of filing the above-identified patent application, Yasmin Thanavala and Charles J. Arntzen inadvertently overlooked or did not realize that Hugh S. Mason had made a significant contribution to the conception of the invention through the design, creation and characterization of the transgenic plant material used in the studies incorporated into this patent application;

THAT, after about one year after the filing of the above application, it was brought to the attention of Boyce Thompson Institute for Plant Research, Inc. that Dr. Hugh

Mason should have been added as an inventor and that Yasmin Thanavala, Charles J. Arntzen and Hugh S. Mason all agree that the three of them are joint inventors and Hugh S. Mason should have been named as an inventor in the originally filed patent application;

THAT, the omission of Hugh S. Mason was in error and without deceptive intent; and

THAT, all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: 24 April, 2001

Yasmin Thanavala

Dated: 17 april 20

Charles J. Arntzen

Dated: 27 Gril 2007

Hugh & Mason